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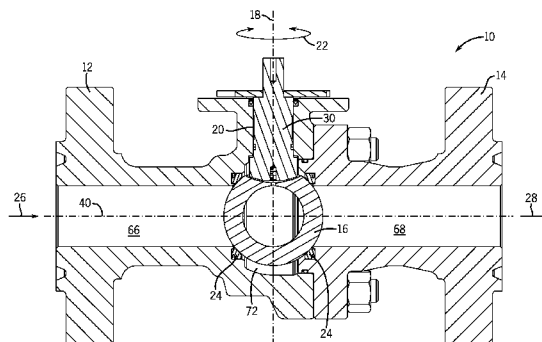
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(54) Title: SELF-RELIEVING BALL VALVE SEAT

FIG. 1



(57) Abstract: A system includes an annular ball valve seat (24) including an annular spring (38), which biases the annular ball valve seat axially. More specifically, the annular ball valve seat includes a main body section (32), a lip section (48) extending from the main body section, and a seat groove (36) between the main body section and the lip section, wherein the first annular spring is disposed within the seat groove. A first leg of the annular spring biases the lip section in a first axial direction and a second leg (42) of the annular spring biases the main body section in a second axial direction opposite the first axial direction. The annular ball valve seat is configured to be disposed within a ball valve, on either side of a ball of the ball valve. The particular design of the annular ball valve seat enables pressure within a body cavity of the ball valve to be self-relieving.